

WHAT IS CLAIMED IS:

1. A flat plug structure, which comprises:

a flat housing, having a space;

a first conductive plate, positioned perpendicularly inside said space and  
5 protruded from the bottom of said housing, having a first containing slot for containing  
and fixing a first conductive wire of a power cable;

a second conductive plate, also positioned perpendicularly inside said space  
and protruded from the bottom of said housing, having a second containing slot for  
containing and fixing a first end of a fuse, wherein, said second conductive plate is  
10 parallel to said first conductive plate, and has a specific distance between them so as  
to be inserted into an outlet;

a fuse seat, positioned inside said space and beside said second conductive  
plate, having a third containing slot and a fourth containing slot, wherein, said third  
containing slot is used to contain and fix a second end of said fuse, and said fourth  
15 containing slot is used to contain and fix a second conductive wire of said power  
cable; and

a bottom plate, is made of an insulator material for carrying said fuse seat and  
removable covers over said space of said flat housing.

2. A flat plug structure as claimed in claim 1, wherein said flat housing, said  
20 first conductive plate and said second conductive plate are made by molding method.

3. A flat plug structure as claimed in claim 1, wherein said first containing slot  
extends right a certain distance from the bottom of said first conductive plate to form a  
bottom of said first containing slot and then extends from two sides of said bottom of  
said first containing slot to form the walls of said first containing slot, and the width of  
25 said bottom is just wide enough to contain said fuse.

4. A flat plug structure as claimed in claim 1, wherein said second containing slot extends right a certain distance from the bottom of said second conductive plate to form a bottom of said second containing slot and then extends from two sides of said bottom of said second containing slot to form the walls of said first containing slot,  
5 and the width of said bottom is just wide enough to contain said fuse.

5. A flat plug structure as claimed in claim 1, wherein the widths of said first containing slot, second containing slot and third containing slot are about equal.

6. A flat plug structure as claimed in claim 1, wherein said third containing slot is a U-shaped, and extends forward from the approximately central of the bottom to  
10 form a U-shaped fourth containing slot, and two walls of said fourth containing slot respectively has a opening, thus, each walls of said fourth containing slot respectively has a first clip and a second clip so as to fasten said second conductive wire of said power cable by said first clip and second clip.

7. A flat plug structure as claimed in claim 1, wherein said flat housing has a square shape, and said flat plug is parallel to said outlet after inserted into said outlet.  
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8. A flat plug structure as claimed in claim 1, wherein said space is located beside said second conductive plate and parallel to said second conductive plate.

9. A flat plug structure as claimed in claim 1, wherein said space is located below said second conductive plate and parallel to said second conductive plate.

20 10. A flat plug structure as claimed in claim 1, wherein it further comprises a ground conductive terminal.

11. A flat plug structure, which comprises:  
a flat housing, having a space;

a first conductive plate, positioned perpendicularly inside said space and protruded from the bottom of said housing, having a first containing slot for containing and fixing a first conductive wire of a power cable;

5 a second conductive plate, also positioned perpendicularly inside said space and protruded from the bottom of said housing, having a second containing slot for containing and fixing a first end of a fuse, wherein, said second conductive plate is parallel to said first conductive plate, and has a specific distance between them so as to be inserted into an outlet;

10 a fuse seat, positioned inside said space and beside said second conductive plate, having a third containing slot and a fourth containing slot, wherein, said third containing slot is used to contain and fix a second end of said fuse, and said fourth containing slot is used to contain and fix a second conductive wire of said power cable; and

15 a bottom plate, is made of an insulator material for carrying said fuse seat and removable covers over said space of said flat housing.

12. A flat plug structure as claimed in claim 11, wherein said flat housing, said first conductive plate and said second conductive plate are made by molding method.

20 13. A flat plug structure as claimed in claim 11, wherein said first containing slot extends right a certain distance from the bottom of said first conductive plate to form a bottom of said first containing slot and then extends from two sides of said bottom of said first containing slot to form the walls of said first containing slot, and the width of said bottom is just wide enough to contain said fuse.

25 14. A flat plug structure as claimed in claim 11, wherein said second containing slot extends right a certain distance from the bottom of said second conductive plate to form a bottom of said second containing slot and then extends from two sides of said bottom of said second containing slot to form the walls of said first containing slot, and the width of said bottom is just wide enough to contain said fuse.

15. A flat plug structure as claimed in claim 11, wherein the widths of said first containing slot, second containing slot and third containing slot are about equal.

16. A flat plug structure as claimed in claim 11, wherein said third containing slot is a U-shaped, and extends forward from the approximately central of the bottom to form a U-shaped fourth containing slot, and two walls of said fourth containing slot respectively has a opening, thus, each walls of said fourth containing slot respectively has a first clip and a second clip so as to fasten said second conductive wire of said power cable by said first clip and second clip.

17. A flat plug structure as claimed in claim 11, wherein said flat housing has a square shape, and said flat plug forms 45 degrees to said outlet after inserted into said outlet.

18. A flat plug structure as claimed in claim 11, wherein it further comprises a ground conductive terminal.

19. A flat plug structure as claimed in claim 11, wherein said space is located beside said second conductive plate and parallel to said second conductive plate.

20. A flat plug structure as claimed in claim 11, wherein said space is located below said second conductive plate and parallel to said second conductive plate.